



UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Gary A. Freeman
Serial No. : 10/712,308
Filed : November 13, 2003
Title : MULTI-PATH TRANSTHORACIC DEFIBRILLATION AND
CARDIOVERSION

Art Unit : 3762
Examiner : Unknown

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Applicant submits the references listed on the attached form PTO-1449. Applicant does not concede that the listed references are prior art. Because the above application was filed after June 30, 2003, applicant is not including copies of the U.S. Patent Documents. Applicant is submitting copies of the Foreign Patent Documents and Other References.

Submitted herewith is an English-language abstract of Reference AYYY (FR 2257312).

This statement is being filed within three months of the filing date of the application or before the receipt of a first Office action on the merits.

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

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Maureen Christiano
Signature

Maureen Christiano

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Substitute Form, PTO-1449
(Modified)

MAR 15 2004

U.S. Department of Commerce
Patent and Trademark Office

Attorney's Docket No.

04644-150001

Application No.

10/712,308

**Information Disclosure Statement
by Applicant**

(Use several sheets if necessary)

(37 CFR §1.98(b))

Applicant

Gary A. Freeman

Filing Date

November 13, 2003

Group Art Unit

3762

U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	6606516	08/12/03	Levine			
	AB	6549806	04/15/03	Kroll			
	AC	6516231	02/04/03	Flammang			
	AD	6484057	11/19/02	Ideker et al.			
	AE	6473645	10/29/02	Levine			
	AF	6411845	06/25/02	Mower			
	AG	6405084	06/11/02	Plicchi et al.			
	AH	6341234	01/22/02	Thong et al.			
	AI	6337995	01/08/02	Mower			
	AJ	6253106	06/26/01	Legay et al.			
	AK	6178351	01/23/01	Mower			
	AL	6148234	11/14/00	Struble			
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	AN	6096063	08/01/00	Lopin et al.			
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	AZ	5431688	07/11/95	Freeman			
	AAA	5423873	06/13/95	Neubauer et al.			

Examiner Signature

Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Information Disclosure Statement by Applicant (Use several sheets if necessary)		Applicant Gary A. Freeman	
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(37 CFR §1.98(b))			

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	ABB	5411525	05/02/95	Swanson et al.			
	ACC	5391187	02/21/95	Freeman			
	ADD	5360435	11/01/94	DeGroot			
	AEE	5344430	09/06/94	Berg et al.			
	AFF	5344429	09/06/94	Smits			
	AGG	5330506	07/19/94	Alferness et al.			
	AHH	5324309	06/28/94	Kallok			
	AII	5314459	05/24/94	Swanson et al.			
	AJJ	5306291	04/26/94	Kroll et al.			
	AKK	5281219	01/25/94	Kallok			
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	AOO	5184620	02/09/93	Cudahy et al.			
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	ATT	4830006	05/16/89	Hulaska et al.			
	AUU	4823796	04/25/89	Benson			
	AVV	4821723	04/18/89	Baker, Jr. et al.			
	AWW	4800883	01/31/89	Winstrom			
	AXX	4768512	09/06/88	Imran			
	AYY	4727877	03/01/88	Kallok			
	AZZ	4708145	11/24/87	Tacker, Jr. et al.			
	AAAA	4641656	02/10/87	Smits			
	ABBB	4637397	01/20/87	Jones et al.			

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	ACCC	4595010	06/17/86	Radke			
	ADDD	4576170	03/18/86	Bradley et al.			
	AEEE	4548203	10/22/85	Tacker, Jr. et al.			
	AFFF	4467807	08/28/84	Bornzin			
	AGGG	4444195	04/24/84	Gold			
	AHHH	4401121	08/30/83	Rodler			
	AIII	4372319	02/08/83	Ichinomiya et al.			
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	ATTT	3774620	11/27/73	Hansjurgens			
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Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AXXX	0602356 A3	12/27/95	Europe				
	AYYY	2257312	08/08/75	France				
	AZZZ							

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							Yes	No
	AAAAA							

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
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	ACCCC	Efimov, Am. J. Physiol. Heart Circ. Physiol.; 279:H1055-70; 2000
	ADDDD	Geddes, L.A. et al., "Fundamental Criteria Underlying the Efficacy and Safety of Defibrillating Current Waveforms"; Med. & Biol. Eng. & Comp.; vol. 23; pp. 122-130; 1985
	AEEEE	Geddes, L.A. et al., "The Prediction of the Impedance of the Thorax to Defibrillating Current"; Medical Instrumentation; vol. 10, no. 3; May-June 1976
	AFFFF	Jones, Douglas L. et al.; "Internal Cardiac Defibrillation in Man: Pronounced Improvement with Sequential Pulse Delivery to Two Different Lead Orientations"; Circulation; vol. 73, No. 3; pp. 484-491; March 1986
	AGGGG	Jones, Janice L. et al.; "Decreased Arrhythmias in Cultured Myocardial Cells Following High Intensity Electric Field Stimulation with Biphasic Rectangular Waveforms"; Federation Proceedings Abs.; vol. 42, n. 4; 1983
	AHHHH	Jones, Janice L. et al., "Decreased Defibrillator-Induced Dysfunction with Biphasic Rectangular Waveforms"; American Journal of Physiology; vol. 247; no. 5; 1984
	AIIII	Schuder et al., "Development of Automatic Implanted Defibrillator"; University of Missouri; Grant No. 5-ROL-HE-21674-04; Devices & Tech. Branch Contractors Meeting Proc.; p. 206; 1981
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	AKKKK	Jones, J.L. et al.; "Reduced Excitation Threshold in Potassium Depolarized Myocardial Cells with Symmetrical Biphasic Waveforms"; J. of Mol. & Cell. Cardiol.; vol. 17, no. 12; abst. no. 39; p. 27; 1985
	ALLLL	Kerber, Richard E. et al.; "Advance Prediction of Transthoracic Impedance in Human Defibrillation and Cardioversion: Importance of Impedance in Determining the Success of Low-Energy Shocks"; Circulation; vol. 70, no. 2; pp. 303-308; Aug., 1984
	AMMMM	Kerber, Richard E. et al.; "Energy, Current, and Success in Defibrillation and Cardioversion: Clinical Studies Using an Automated Impedance-Based Method of Energy Adjustment"; Circulation; vol. 77, no. 5; May, 1988
	ANNNN	Schuder, J.C. et al.; "Asymmetrical Bidirectional Wave Defibrillation in Calves"; Proc. of the 35th Annual Conf. on Eng. In Medicine and Biology; vol. 24; p. 41; 1982
	AOOOO	Schuder, John C. et al.; "Defibrillation of 100kg Calves with Asymmetrical Bidirectional, Rectangular Pulses"; Cardiovascular Research; vol. 18; pp. 419-426; 1984
	APPPP	Schuder, John C. et al.; "Optimal Biphasic Waveform Morphology for Canine Defibrillation with a Transvenous Catheter and Subcutaneous Patch System"; Circulation Supplement; Abstracts of the 61 st Scientific Session; Part II, vol. 78; no. 4; p. II-219; 1988

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	AQQQQ	Jones et al.; "Defibrillator Waveshape Optimization"; Case Western University; Grant No. 5-R01-HL24606-03; Devices and Tech. Branch Contractors Meeting Program; p. 135; 1982
	ARRRR	Schuder, John C. et al.; "Experimental Ventricular Defibrillation with an Automatic and Completely Implanted Systems"; Trans. Amer. SOC. Artif. Int. Organs; vol. 16; pp. 207-212; 1970
	ASSSS	Schuder, John C. et al.; "Transthoracic Ventricular Defibrillation in the 100 kg Calf with Symmetrical One-Cycle Bidirectional Rectangular Wave Stimuli"; IEEE Trans. On Biomedical Eng.; vol. BME-30, no. 7; July 1983
	ATTTT	Schuder, John C. et al.; "Transthoracic Ventricular Defibrillation in the 100 kg Calf with Untruncated and Truncated Exponential Stimuli"; IEEE Trans. on Biomedical Eng.; vol, BME-27, no. 1; Jan. 1980
	AUUUU	Schuder, J.C. et al.; "Ultrahigh-Energy Hydrogen Thyatron/SCR Bidirectional Waveform Defibrillator"; Medical & Biological Engineering & Computing; vol. 20; pp. 419-424; 1982
	AVVVV	Tang, Anthony S.L. et al.; "Strength Duration Curve for Ventricular Defibrillation Using Biphasic Waveforms"; PACE, vol. 10; no. 2; p. 418; 1987
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	AXXXX	Tang, Anthony S.L. et al.; "Ventricular Defibrillation Using Biphasic Waveforms: The Importance of Phasic Duration"; JACC; vol. 13, no. 1; pp. 207-214; 1989
	AYYYY	Lown, B. et al.; "Sounding Boards The Energy for Ventricular Defibrillation – Too Little or Too Much?"; NEJMAG 298(22) 1213-1264 (1978)
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	AAAAAA	Warner, E.D. et al.; "Myocardial Injury From Transthoracic Defibrillator Countershock"; Arch. Pathol., vol. 99; pp. 55-59; 1975
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	ADDDDD	Kerber, R.E. et al.; "Automated Impedance-Based Energy Adjustment for Defibrillation: Experimental Studies"; Circ., vol. 71; no. 1; pp. 136-140; 1985
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	AFFFFF	Fujimoto, L.K. et al., "Human Thoracic Anatomy Based on Computed Tomography for Development of a Totally Implantable Left Ventricular Assist System"; Artificial Organs 8(4):436-444 (1984)
	AGGGGG	Jacobs, G.B. et al.; "Human Thoracic Anatomy Relevant to Implantable Artificial Hearts," Artificial Organs; vol. 2; no. 1; pp. 64-82; 1978
	AHHHHH	Lee, M.M.C. et al.; "Postmortem Studies of Skinfold Caliper Measurement and Actual Thickness of Skin and Subcutaneous Tissue"; Human Biol., 37:91-103;1965
	AIIIII	Oberman, A. et al.; "Heart Size of Adults in a Natural Population – Tecumseh, Michigan"; Circulation, 35:724-733,1967
	AJJJJJ	Schnittger, I. et al.; "Standardized Intracardiac Measurements of Two-Dimensional Echocardiography"; JACC 2(5):934-38; 1983

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AKKKKK		Geddes, L.A. et al.; "The Specific Resistance of Biological Material – A Compendium of Data for the Biomedical Engineer and Physiologist," Med. & Bio. Eng.; vol. 5; pp. 271-293, 1967

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